

PUBLIC HEALTH SERVICE

BETHESDA 14, MD.

July 9, 1964

Joshua Lederberg, M. D.
Professor of Genetics
Stanford University School of Medicine
Stanford Medical Center
300 Pasteur Drive
Palo Alto, California

Dear Doctor Lederberg:

I want you to know how much I appreciate your letter of June 24 anent the artificial heart. It is particularly interesting because a number of the recommendations you make coincide with some of the activities we have either considered or are planning. Among these are:

Consultation with officials in NASA, AEC and D.O.D. To date there might be a possibility of D.O.D. pursuing a systems analysis, but the "higher-ups" in NASA and AEC have decided against it. If we can't get this done within the Government and if we get the funds we would propose to contract this out with an organization comparable to the Rand outfit.

To go back a little, I testified before both the House and Senate Appropriations Subcommittees a year ago about the possibility of such a development. Our public witnesses also stressed the point. This was repeated again this year with a request for funds for "starting" a program. Mike DeBakey testified before Senator Hill's committee last week requesting a million dollars for a systems review. This was after I had received your letter.

About a year ago, I was able to recruit as an Associate Director for Program Planning, Dr. John R. Beem, formerly Medical Director for Warner-Lambert, and since he joined us last October he has been devoting most of his energies to the development of this program. It hasn't been easy, since the contract mechanisms with which NHI has to deal are so bound up in DHEW red tape that it requires an interminable delay to get things moving. (To award a contract over \$25,000, the request must go through NIH, and PHS to the Department and has to be personally signed by the Secretary.) We are trying to do something about this and in so doing have the complete backing of Jim Shannon and -- I hope -- the current "President's

Commission on Cancer, Heart Disease and Strokes," before which I have testified three times to date.

Dr. Beem, in turn, has recruited as a member of his staff, Dr. Frank Hastings, a surgeon who has been doing research in the artificial heart field and who is dedicated to playing a role in its development from the administrative standpoint.

We would be the first to admit that the NIH in general -- with the possible exception of the Cancer Institute -- and the NHI specifically are novices in the area of developmental contract know-how. We are trying, though, and letters such as yours give us heart.

We would like to take advantage of your interest and enthusiasm about this project, and if you are not going to be in Bethesda in the near future, I would like for Drs. Beem and Hastings to get together with you sometime in Palo Alto to bat the subject about.

Incidentally, Julius Comroe who is a member of the National Advisory Heart Council has had some thoughts somewhat similar to yours, and since he is so near, we might get him in on such a discussion. I am taking the liberty of sending him a copy of your letter.

Thanks again and with best wishes.

Sincerely yours,

Ralph E. Knutti, M. D.

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Director

National Heart Institute